

Bridging the knowledge gap: Strategies for supporting teachers instructing outside their subject expertise

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Abstract

This study examined the challenges, coping strategies, and impacts of teaching outside one's subject expertise. The research aimed to understand how teachers manage instructional responsibilities beyond their area of specialization and how these experiences affect both teaching and learning outcomes. A qualitative research design was employed, utilizing semi-structured interviews with seven teachers handling subjects outside their field of expertise. The collected data were analyzed using thematic analysis within a phenomenological framework to capture the lived experiences of the participants. Findings revealed several key challenges, including weak cognitive foundations of learning, insufficient pedagogical knowledge and skills, limited skill competence, declining teacher wellness, and inadequate administrative support. To address these challenges, teachers adopted various coping strategies such as thorough preparation and planning, the use of diverse instructional approaches, focus on curriculum and learning goals, resourcefulness in utilizing available materials, student-centered focus, and effective use of non-verbal communication. The implementation of these strategies resulted in both positive and negative impacts on educational stakeholders. Positive outcomes included improved teaching skills, enhanced student engagement, and well-rounded knowledge in non-specialized subject areas. However, negative effects were also evident, such as increased mental and emotional strain among teachers, lower academic performance among students and expertise becomes outdated. Overall, the study highlights the need for adequate support systems and professional development opportunities to assist teachers assigned outside their specialization and to ensure quality education.

Keywords: bridging, knowledge gap, strategies, supporting teachers, subject expertise

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1. Introduction

The K to 12 Basic Education Program was introduced in the Philippines to enhance the quality of education by adding two additional years to the basic education curriculum. Its primary objective is to produce graduates who are equipped with essential competencies and skills for employment, entrepreneurship, and higher education. Through the implementation of Senior High School, learners are expected to develop lifelong learning abilities and become more competitive in both local and international job markets. This reform also aims to align the Philippine education system with global standards, fostering mutual recognition of Filipino professionals abroad (Abragan et al., 2022). However, despite the intentions behind the K to 12 Program, several issues have emerged in its implementation. These include inadequate infrastructure, insufficient learning materials, inexperienced teachers, and large student populations. According to De Leon (2019), the spiral progression approach—one of the key features of the program—has also faced obstacles such as a lack of subject-matter expertise, time constraints, and limited government support. One major concern is teacher specialization, where educators are assigned to teach subjects outside their field of expertise.

Teaching out-of-field is a phenomenon defined by Ingersoll (1999) and Hobbs (2013) as the assignment of teachers to subjects, grade levels, or school types without the necessary training or qualifications. This situation arises due to systemic teacher shortages, uneven distribution of educators, scheduling issues in schools, and a teacher education system that trains educators as specialists rather than generalists (Hobbs et al., 2021). As a result, many teachers today face the challenge of teaching subjects outside their specialization. Teachers assigned to teach outside their field often struggle to generate new activities, exhibit reduced creativity and confidence, and tend to rely on traditional teaching methods (Co et al., 2021). These difficulties can negatively impact student learning and academic performance. Teachers with limited pedagogical content knowledge (PCK) may hinder students' understanding of subject matter. As Ball et al. (2005) emphasized, educators lacking sufficient content knowledge are less effective in helping students grasp key concepts, contributing to declining educational quality and reinforcing existing inequalities.

Furthermore, the issue of out-of-field teaching contradicts the principles of Sustainable Development Goal 4 (United Nations, 2015), which aims to ensure inclusive and quality education for all. The SDG 2030 agenda emphasizes that no learner should be left behind and highlights the crucial role of teachers in achieving educational equity and excellence. Teachers serve not only as knowledge providers but also as role models who influence students' attitudes toward learning and life. Thus, strengthening teacher alignment with their area of expertise is essential in improving educational outcomes. Despite these existing challenges, there remains a significant gap in the current literature regarding the specific impacts of teaching out-of-field in the context of K to 12 implementations. While various studies have identified general issues in the program, few have explored the implications of teacher misalignment on teaching effectiveness and student outcomes. Additionally, there is limited research that captures the lived experiences and coping strategies of out-of-field teachers. Addressing this gap is essential for formulating policies and interventions that ensure proper teacher deployment and improve the overall quality of education in the country.

Research Gap - Most of the existing local and international studies on out-of-field teaching have focused on its effects on teacher competence, instructional challenges, and student academic performance. However, there remains a significant research gap concerning the lived experiences of out-of-field teachers, particularly regarding the specific challenges they encounter, the coping strategies they employ, and the positive and negative impacts of teaching outside their area of specialization. Furthermore, this gap is particularly evident in public secondary schools in the Cordillera Administrative Region, particularly in Baguio City and La Trinidad, Benguet, where

limited qualitative studies have explored these experiences to provide evidence that can inform teacher deployment policies, professional development programs, and administrative support mechanisms.

Research Objectives - Specifically, this study sought answers to the following questions.

1. What are the experiences of teachers assigned to teach subjects outside their area of specialization?
2. What coping strategies do teachers use when teaching subjects outside their area of expertise?
3. What are the perceived impacts of teaching subjects outside their area of specialization?

2. Methodology

Research Design - A qualitative research design was used in this study, specifically phenomenological research. This aims to uncover what a particular experience means to a group of people and how they experienced it. As well as to better understand and identify the coping strategies of teachers who are teaching outside their knowledge. Since it addresses the “what” and “how” research questions which provides deeper understanding of the experiences, adjustments and impact of teaching outside their expertise. In connection, according to Bashir et. Al (2008) qualitative studies are tools used in understanding and describing the world of human experience.

Population and Locale of the Study - There were seven (7) participants in this study. This sample size was deemed sufficient based on the principle of data saturation, which occurs when no new information or themes emerge from additional interviews (Guest, Bunce, & Johnson, 2006). The participants were selected through purposive sampling. According to Creswell (2014), purposive sampling involves selecting participants because they are believed to provide meaningful and relevant information that contributes to the analysis of the study. The criteria for participant selection were as follows: (1) currently teaching in a public secondary school, (2) assigned to teach a subject outside their field of specialization, (3) with at least one year of teaching experience, and (4) willing to voluntarily participate in the study. The population of this study consisted of seven (7) teachers with various subject specializations who were teaching outside their field of expertise in selected public secondary schools in La Trinidad, Benguet and Baguio City. Furthermore, the study was conducted in selected public secondary schools in La Trinidad, Benguet and Baguio City. These schools were purposively selected because they have teachers assigned to teach subjects outside their area of specialization due to teacher shortages, scheduling constraints, and school staffing needs. In this study, out-of-field teachers refer to educators who are assigned to teach subjects that are not aligned with their academic preparation or professional specialization. Preliminary observations and existing literature indicate that these teachers often encounter challenges related to content knowledge, pedagogical competence, instructional preparation, and teacher well-being, making them appropriate participants for exploring the lived experiences, coping strategies, and impacts of out-of-field teaching.

Data Collection Instrument - The data were collected using a semi-structured interview guide. The interview guide was organized into three parts: the first focused on the challenges encountered by teachers teaching outside their field of specialization, the second explored the coping strategies they employed, and the third examined the perceived impacts of teaching subjects outside their area of specialization. To ensure the credibility of the instrument, the interview guide was validated by experts in the field and was revised based on their recommendations before the conduct of the actual interviews.

Data Collection Procedure - After securing formal approval from the school administration, the researcher recruited participants based on the established inclusion criteria. The prospective participants were then informed about the purpose of the study, assured that their participation was voluntary, and asked to sign an informed consent form. One-on-one, in-depth semi-structured interviews were conducted at the participants' preferred time and venue until data saturation was achieved. With the participants' permission, a digital voice recorder was used to record all interview sessions. The recorded interviews were subsequently transcribed verbatim to ensure the accuracy and completeness of the collected data.

Data Analysis - The data collected were analyzed using inductive thematic analysis. The researcher transcribed the audio-recorded interviews and repeatedly reviewed the transcripts to become familiar with the data. Initial codes were generated from significant statements and recurring ideas, which were then organized into categories, themes, and sub-themes that reflected the participants' lived experiences. To ensure the credibility of the findings, member checking was employed by allowing the participants to review the accuracy of their interview transcripts and clarify any statements when necessary. The identified themes were further presented using tables, charts, and diagrams to facilitate the interpretation of the findings.

Ethical Considerations - Prior to data collection, the researcher obtained approval from the school administration to conduct the study. Each participant was provided with a written informed consent form after being informed of the purpose, objectives, and procedures of the research. Participation in the study was entirely voluntary, and participants were informed that they could withdraw from the study at any time without any consequences. To ensure confidentiality and data security, all interview recordings and transcripts were stored in a password-protected computer accessible only to the researcher. To protect the anonymity of the participants, their identities were concealed through the use of participant codes in all transcripts and reports.

3. Results and Discussions

The findings of the study were divided into three sections. The first section discussed the challenges encountered by teachers who were teaching outside their field of specialization. The second section focused on the coping strategies employed by these teachers to effectively manage the demands of teaching subjects beyond their area of expertise. The third section examined the perceived impacts of out-of-field teaching on both teachers and students, highlighting its positive and negative implications on instructional practices, teacher well-being, and student learning outcomes.

3.1 Challenges Encountered by Teachers who are Teaching Outside Their Subject

Challenges refer to difficulties or obstacles that need to be overcome. They can arise in various contexts and demand effort, skill, and resilience to address. Teaching outside of one's specialization can lead to several significant issues. The challenges encountered by the teachers teaching outside their expertise are classified into five main themes. These are a.) weak cognitive foundations of learning, b.) insufficient pedagogical knowledge and skills, c.) limited skill competence, d.) declining teacher wellness, and e.) inadequate administrative support.

3.1.1 Weak Cognitive Foundations of Learning

Teachers teaching outside their specialization exhibit weak cognitive foundations of learning, as evidenced by their limited ability to understand, and explain subject content. This gap affects their capacity to reinforce fundamental concepts and provide clear, instruction to students. According to the participants' experiences, they shared:

"The main challenge is the lesson itself, because I only have a little background about it." (P-6)

"Regarding the challenges in teaching Filipino, the content was challenging. I had a hard time understanding the topics because it was my first time reading and learning them." (P-3)

"Okay, for me, there is a lack of in-depth knowledge on that major. Although I possess some knowledge in that area, it's not particularly extensive or in-depth, and as for the students, I haven't encountered any issues. It focuses solely on the subject itself." (P-7)

Teachers teaching outside their specialization face crucial issues and challenges and these challenges are mainly due to limited subject matter knowledge (SMK) and influenced the teacher's pedagogical content knowledge (PCK), which is crucial in the preparation and actual teaching (Co, A.G.E., Abella, C.R.G. and De Jesus, F.S., 2021). The teachers faced difficulties understanding the main concepts due to lack of foundational

knowledge causing difficulties in ensuring students' solid knowledge of basic principles before moving on to more complex topics. Lessons outside their area of expertise did not flow as smoothly as within their area of expertise, as they made frequent changes and were sometimes unable to build explanations in response to students' questions (Mizzi, 2013).

3.1.2 Insufficient Pedagogical Knowledge and Skills

For teachers handling subjects outside their area of expertise, it is often the absence of this subject-specific PCK that leads to difficulties. Without a strong foundation in how to teach the content, teachers struggle to choose appropriate instructional strategies, anticipate learners' misconceptions, and deliver lessons that align with the intended competencies. This lack of specific pedagogical knowledge is reflected in the experiences of the participants. They noted challenges in selecting strategies, planning lessons accurately, and demonstrating content effectively:

"It was hard considering the strategy. In TLE, it is the same, it is full of content so it's hard to teach it because it requires skills." (P-3)

"The learning plan is not accurate with the learning outcome, which may lead to a lack of effective demonstration of the topic." (P-1)

Teachers teaching outside of their expertise have also faced difficulties in student engagement. Given the importance of student interaction in building the students' communication skills, it is essential to explore how teachers can foster student engagement within lessons (Cents-Boonstra, 2020). It is difficult to engage students effectively without a strong background in the subject, that may affect teachers to make the content interesting and relevant, especially with a class of numerous backgrounds. As the participants verbalized:

"Student engagement is always a challenge for me, not just because I'm less familiar with the subject, but because most of the students are more diverse, they have different ideas, opinions, and thoughts." (P-1)

"There are challenges I've faced in maintaining student engagement while teaching subjects I am less familiar with, because at first, I didn't know how to handle them through this subject." (P-6)

3.1.3 Limited Skill Competence

In addition to pedagogical knowledge, skill is critical for effective teaching. Zamora, J. T., & Zamora, J. J. M. (2022), define skill as the technical and professional abilities like manipulation and technique required for specific work processes, developed through training and experience. Competency, as defined by Selvi (2016), goes beyond technical skill, encompassing knowledge, skills, attitudes, values, motivations, and beliefs needed for effectiveness in a role. Skill competence is essential in teaching to achieve lesson objectives. Teachers assigned to subjects outside their specialization often lack skill competence due to limited access to relevant training and seminars. This challenge impacts their ability to use effective teaching strategies and manage classroom tasks, as reflected in participants' experiences:

"As I expected, I experienced several challenges that make me question whether I may or will be an effective teacher. Specifically, when I was tasked with facilitating and teaching the MAPEH subjects in junior high school, which is not my major or specialization, I don't have actual experience or something in performing, like having exposure in terms of joining a group or club with proper training." (P-1)

"Teaching outside my specialization may affect my.. ahh professional growth and development because I am not prepared for this and I'm lack of training about this specific area of me of specialization." (P-6)

3.1.4 Declining Teacher Wellness

For teachers assigned to subjects outside their specialization, managing workload, learning new content, and balancing personal responsibilities often leads to declining wellness. Moreover, without adequate support and professional development, they struggle to handle stress, stay motivated, and maintain job satisfaction. These factors were evident in the participants' experiences, highlighting the impact of teaching unfamiliar subjects on their mental health and well-being.

"During my first year of teaching, it was very challenging, time consuming, and brain rocking experience." (P-4)

"There are times I forget, or I used other terms that could have an effect on the understanding of the learners when it comes to my explanation. "I was a nursing mother then and I was just starting to teach - not to mention the subjects given to me were outside my area of specialization – and I had to learn to juggle between my job time and my mom time." (P-2)

This implies that learning new content, developing lesson plans, and teaching unfamiliar subjects can cause significant stress and anxiety. The additional preparation required to teach outside specialization can lead to an increased workload, making it difficult to balance work and personal life. According to McCallum & Price (2016) teacher quality, retention, satisfaction, and wellbeing are key elements for a sustained profession, to maintain motivation, and prepare to teachers to fulfill aspirational outcomes as leaders. In addition, it is discovered that in high-performing systems, attitude and efficacy, are crucial, and that teacher wellbeing and teacher quality are intimately associated (Mingren & Shinguan, 2018).

3.1.5 Inadequate Administrative Support

Administrative support is necessary for teachers, especially when they are teaching outside their specialization. According to Peronto, J. L. (2013) the overall goal of the administrative support is retention of teachers in the classroom. To accomplish this, new teachers need time, opportunity, and resources from the administration to become proficient teachers (Black, 2004). Additionally, they need adequate supplies and materials, interpersonal support, and continuous feedback on classroom management, pedagogy, and lesson delivery (Dumler, 2010). Lack of sufficient administrative support can cause several challenges that impact their effectiveness in teaching. According to Cancio, E. J., Albrecht, S. F., & Johns, B. H. (2013) Supportive administrators have been found to offset the negative effects of a burdensome workload (Texas Center for Educational Research, 2006) and attrition due to stress, certification status, and workload manageability (Brownell, Smith, McNellis, & Miller, 1997).

With the study's interview findings some of the participants stated that administrative support is a challenge in terms of implementing trainings and seminars for additional knowledge, and lack of resources.

"I haven't noticed anything that they've prepared for us this time – in terms of development, uhmm... like those implementations of trainings, seminars to help us here. But there, there's none, there's no training that we received that supports us in this area. Uhhm, and uhmm... our school said that's only a minor subject." (P-7)

"Also, resources like gadgets to use is a challenge, money to buy load for internet research since there were no reference books accessible since there were no reference books accessible – I use my money that's supposed to be for my son, there is unsupportive school head, and work overload." (P-4)

However, some of the participants stated that, the administrative support is not a challenge as they stated:

"The administration is proud to provide teaching materials such as books and modules. They also allow the teacher to use various types of teaching strategies to gain confidence and maintain

interest.” (P-1)

“I feel that they are always there to support us teachers.” (P-6)

“They were giving instructional materials and offer seminars and training for us.” (P-1)

3.2 Coping Strategies of Teachers who are Teaching Outside Their Subject Expertise

Based on the coded statements, the coping strategies of teachers were generated into five themes. These are: 1) Preparation and Planning; 2) Instructional approaches; 3) Learning and Curriculum Focus; 4) Resourcefulness; 5) Student - Center Focus; 6) Non-verbal Communication.

Preparation and planning are an effective way to cope when teaching outside expertise because it can lead to a considerable improvement in teachers' confidence and competence when teaching subjects, they are not as familiar with. Like Khan, S. et.al (2024), where the findings emphasize how crucial it is to include thorough lesson planning techniques in the creation of curriculum and instructional methods. Also, when working outside areas of expertise, educators can benefit from using varied instructional strategies. Adaptive teaching entails modifying instruction at both the macro and micro levels (Corno, 2008).

In addition, curriculum focus is supported by Watermeyer (2011), who noted that curriculum alignment connects content validity, coverage, and learning opportunities. Resourceful teachers maximize available tools (Kola, A. J., & Abdulwasii, A. A., 2023). Furthermore, learner-centered strategies enhance students' learning skills and strategies by providing more opportunities to develop their capabilities. Lastly, for nonverbal communication, according to (Bambaeroo, F., & Shokrpour, N., 2017) they stated that “when a recipient receives conflicting verbal and nonverbal signals, it's beneficial to emphasize the nonverbal cues, as they typically convey the sender's true feelings and intentions. Compared to verbal communication, nonverbal communication is frequently regarded as more reliable.”

3.2.1 Preparation and Planning

Preparation and planning pertain to the teachers' advanced arrangement of comprehensive concepts in a topic to effectively deliver the lesson well. As the respondents stated:

“It's advanced preparation to show you are confident.” (P-3)

“I rarely go to class without having read my topics. I research on unfamiliar topics or aspects, study it.” (P-4)

“I must learn the subject first before I teach.” (P-2)

“Most of the time, I prepare the learning plan and materials and then review them.” (P-1)

“I prepare my lesson and materials before we start.” (P-6)

Most teachers highlighted that advanced preparation is crucial when teaching outside their expertise, as it reduces stress, prevents exhaustion, and improves efficacy. Careful planning provides classroom structure and purpose (Villena & De Mesa, 2015), while pre-planning aligns lessons with learning goals and integrates feedback on teaching effectiveness (Hattie, 2009). Teachers stressed reviewing materials and preparing lessons in advance to ensure mastery, deliver clearer explanations, and promote meaningful discussions. Common strategies include consulting textbooks, work plans, and online resources to enhance content knowledge and develop instructional ideas (Children & McNicholl, 2007; Kind, 2009; McNichol et al., 2013, as cited in Mizzi, 2022).

In addition, English teacher number two mentioned that she can use the resources that her colleagues have provided her, demonstrating their empathy and motivating her with the will to carry on. In fact, Johnson (2003) discovered that when planning, discussing, and participating in cooperative teams, there are "significant emotional

and psychological benefits associated with working closely with colleagues in teams" (p. 343) (ibid, p. 344).

3.2.2 Instructional Approach

Teachers can employ a variety of techniques to maximize student learning when teaching outside their expertise. These are reflected from the responses given by the teachers:

a. Direct Instruction:

Teachers combine direct instruction with practical application to enhance learning: *"I instruct them what to do for application"* (P-3); *"I emphasize practical application of cooking"* (P-7); *"I just delivered confidently in front of my students"* (P-5). Direct instruction is a teacher-led approach where the instructor guides students clearly and systematically (Renard, 2023). However, Hattie (2009) highlights the importance of applying knowledge in real-world situations, and active learning improves comprehension and engagement (Chi & Wylie, 2014). In vocational subjects like cookery, hands-on practice deepens understanding and develops practical skills.

b. Narrative Utilization:

Teachers integrate learning theories and practical examples to enhance student understanding, memory, and retention: *"I focus much more on theories than applications"* and (P-1); *"I would usually use stories, examples, or tell stories as examples"* (P-2). According to IOPN (2020), knowing foundational learning theories helps teachers design courses that clarify teaching choices and guide lesson planning. P-2 emphasized that *"using stories to capture attention and deliver lessons effectively, fostering a positive learning environment and encouraging active participation."* Stories also promote diversity, contextualize information, and help students retain complex concepts by connecting them to relatable experiences (National Geographic, 2024; Szurmak & Thuna, 2013).

c. Engagement Techniques:

Teachers teaching outside their specialization use various strategies to engage students, such as videos, games, and audiovisual aids: *So, what I did is teach it based on videos; I let them play... with what I know through games to discuss, it's more on individual activities; for example, in tool parts and equipment, I use PowerPoint"* (P-3); *"With the use of visuals, audio visuals, videos"* (P-2); *"Game activities... like games that would help the children easy to learn the subject"* (P-2); *"I would usually use the whole to part strategy"* (P-2); *"There is also an activity like pass the ball... The game itself is used to discuss the topic"* (P-7); and *"I tried various strategies... such as game-based and workshop-based"* (P-1).

These approaches reflect student-centered learning, where teachers facilitate rather than control learning. Gamification improves motivation and engagement (Deterding et al., 2011; Chans & Castro, 2021), multimedia learning enhances understanding and retention (Mayer, 2002; Ercan, 2014), and interactive strategies boost knowledge retention and satisfaction (Senthamarai, 2018).

d. Result-Oriented Based and Criterion-Based

One participant stated, *"I tried various strategies in the implementation of the lesson to meet the curriculum standards and educational goals, such as standard-based and outcome-based teaching and learning"* (P-1). Criterion-based assessment evaluates students against preset criteria rather than peer performance (Harvey, 2004). When teaching outside their expertise, teachers consider student engagement, progress, and feedback quality, focusing on achieving specific objectives through organized tasks, measurable goals, and frequent monitoring of results (Huria, 2023). Thus, it involves organizing tasks, setting measurable goals, monitoring progress, and clarifying intended outcomes.

3.2.3 Learning and Curriculum Focus

Learning and curriculum focus is crucial for directing effective coping teaching strategies. Several crucial indications underscore its significance:

a. Experiential Learning

This approach emphasizes learning by doing, where students learn best through real-world activities. Experiential learning involves direct participation, reflection, and application of new understanding (Luckner & Nadler, 1997). Through engaging with new material and reflecting on experiences, teachers can also improve their instructional strategies, benefiting both student learning and their professional growth. This is supported by one respondent (P-7), who stated, *“It is more effective if it is experienced – like what really happened – that you experienced it.”*

b. Curriculum Awareness

This approach highlights the importance of curriculum awareness in ensuring effective teaching and learning. Understanding and adhering to learning competencies allows teachers to align lesson objectives with curricular standards, organize instruction effectively, and provide clear, realistic examples that support student understanding. When teachers are familiar with the curriculum guide, they are better able to predict learning outcomes, simplify complex concepts, and connect lessons across disciplines.

This strategy is evident in the participants’ statements:

“I follow the learning competencies set in the curriculum for the subject and make sure that my objectives for the lessons are aligned with them” (P-4)

“I always try to understand the curriculum guide.” “And the objectives of the lesson are the most essential when predicting the learning outcome” (P-1)

“I would try to connect the subject or use other disciplines to explain the subject in better way or more simplified way” (P-2)

“I relate it to more realistic example” (P-6)

“I can explain or elaborate our lesson to them and achieve the objective at the end of the lesson” (P-6).

Consistent with this, curriculum awareness promotes continuity across subjects and grade levels and enhances overall teaching quality. For non-specialist teachers, strictly following the curriculum or textbooks serves as an effective coping mechanism to maintain alignment and coherence in instruction (Kind, 2009).

3.2.4 Resourcefulness

Teachers that are resourceful exhibit a variety of techniques that improve their efficacy as educators. Important metrics consist of:

a. Website Referencing

Most participants reported using web references as a coping strategy to enhance their knowledge and teaching effectiveness. They consulted various online resources to prepare lessons, deliver materials, and engage students. As they shared: *“I watch videos from YouTube”* (P-3); *“Websites, internet websites, as my resource aside from books”* (P-2); *“I’ll research for them, I usually go to the internet – of course it’s given that I should screen the resources I get from the internet”* (P-4); *“I do a lot of research”* (P-7); and *“I also searched the internet for more detailed information”* (P-5).

Filimban (2005) similarly notes that using diverse online resources in secondary classrooms helps teachers maintain instructional consistency. Access to lesson plans and educational materials online allows teachers to stay updated on best practices and align teaching with curriculum standards. Similarly, Amerstorfer and von Münster-Kistner (2021) found that YouTube, as a tutorial resource, enhances both visual and auditory learning, improving comprehension of complex subjects and clarifying concepts that textbooks often cannot.

b. Textual Sources

Educators manage stress and enhance their skills by using resources such as books, articles, and instructional websites. As Math Teacher (P-6) shared, *"I can overcome it by reading some resources and materials that help me understand the lesson every day."* These resources provide strategies for handling classroom challenges, improving instruction, and reducing stress, ultimately strengthening professional coping skills. Other participants also supported this approach: *"Then I read"* (P-3); *"Okay, so aside from books. I really have to read the lesson"* (P-7); and *"I use several books with different authors as references"* (P-1).

c. Consultation with Experts

Most participants reported consulting experts and peers to navigate teaching unfamiliar subjects, emphasizing the importance of collaboration with knowledgeable colleagues. They shared: *"I don't hesitate to go to colleagues who I know are well-versed on the unfamiliar topics"* (P-2); *"I also ask questions to those who know more or the teacher of that subject. I asked help from them – I went to meet them so that I could also learn how to teach that specific major, ma'am"* (P-7); *"I seek help from the experts"* (P-1); and *"I ask for the guidance and expertise of my coworkers who mastered that subject"* (P-4). This aligns with Mizzi (2022), who found that educators actively consult colleagues for clarifications before teaching students.

d. Utilization of Actual Materials

Teachers can manage teaching areas outside their major by using tangible resources. As one AP teacher (P-3) said, *"I show them different farm tools."* Concrete materials, which are directly perceivable, promote retention, deeper understanding, and critical thinking. Such resources can support meaningful learning across subjects like math. Sarama and Clements (2009) found that manipulatives in early math enhance problem-solving, spatial thinking, and number comprehension. Likewise, Hofstein and Lunetta (2003) emphasize that interacting with real-world items in science strengthens understanding, critical thinking, retention, and engagement.

3.2.4 Student - Center Focus

Student-centered learning, or learner-centered education, shifts the focus from the teacher to the student. In this approach, teachers act as facilitators or guides, supporting and encouraging students in their learning journey. The goal is to bring the classroom to life, with the teacher as a "guide on the side," helping students achieve objectives set collaboratively by the teacher and students (Overby, 2011).

Some key indicators of a student-centered focus are as follows:

a. Students' Involvement

Involving students in teaching strategies enhances engagement, ownership, and motivation. Teachers outside their specialization employ collaborative and individual activities, ensuring each student contributes and providing regular feedback. Participants shared:

"It's more on individual activities not really on collaborative work, that's why I assign fewer"

collaborative works or group activities. Afterwards reading activity” (P-3).

“I would let other students answer, let other learners answer the question if ever there are learners who can answer the question” (P-2).

“What I usually do is give the question back to them and ask for their opinions about the topic. When it is not opinionated, I would rather give them the assignment to research for it” (P-1)

“I make room for collaboration and brainstorming. I tend to implement democratic teaching style where every student's voice is heard. Mostly a student-based approach to subject implementation” (P-1).

b. Adaptation to Students' Needs

Teachers handling subjects outside their expertise must be adaptive and flexible to address challenges. As one Math teacher (P-6) stated, *“I teach according to the needs of my students,”* creating a supportive learning environment and promoting engagement through differentiated activities. Similarly, an AP teacher noted, *“I assign fewer collaborative works or group activities.”* Differentiated instruction aims to tailor the curriculum to individual learners' needs, accommodating diverse learning styles, abilities, and interests (Tomlinson, 2001). Like the result of the study conducted by Corno, L. (2008) also found that adaptive teachers form flexible learning groups, applying both intellectual and technical skills to foster engagement and skill development.

c. Non-Verbal Communication

FIL Teacher (P-7) stated, *“I have to make an ‘eye-to-eye contact.’* This reflects a strategy teachers use to project confidence while teaching outside their subject expertise and to capture learners' attention. Similarly, English Teacher Two shared that she managed her nervousness by delivering lessons confidently, especially when handling unfamiliar topics, as confidence helps maintain class flow and reduces fear of criticism. Maintaining eye contact also allows teachers to manage behavior nonverbally and convey messages effectively, strengthening teacher–student relationships (Barati, 2015). In support of this, Hussain, M. S., & Khan, S. A. (2022) found that self-assured teachers are generally more successful, while Burgoon et al. (2021) emphasized the importance of nonverbal communication in effectively conveying meaning in classroom interactions.

3.3 Impacts of Teaching Outside Expertise on Teachers and Students

The practice of teaching outside one's field of expertise affects both teachers and students in various ways. Numerous positive and the negative effects on students and teachers were discovered. Positive effects include improvement of teaching skills, better student engagement, and well-rounded knowledge on the non-specialized subject. Conversely, negative impacts consist of mental and emotional toll on teachers and student low academic performance.

3.3.1 Improvement of Teaching Skills

Under the improvement of teaching skills, there is personal growth which includes acceptance, feel inspired, appreciative and passionate. As the respondents shared,

“I was able to appreciate the skills that I teach like cooking where I found inspiration to cook as well.” (P-3)

“I see this as an opportunity to learn more and love my profession.” (P-6)

Then, professional growth comprises of creative, explore more, satisfied, competent,

helpful/beneficial, good steward and flexible. Depicted on the responses, one positive impact is that the teacher achieves and improve his or her professional growth, personal development, and personal goals.” (P-2)

“How I overcame them is that I was taught – it was inculcated to me – to be a good steward of anything I was given the opportunity to manage.” (P-4)

These results conform why teachers wholeheartedly taught subjects outside their expertise. They saw the challenge as an avenue for them to learn new things. Their passion led them to become more resourceful and versatile (Co, A.G.E., 2021). These characteristics help them adapt to the changes brought about by out-of-field teaching (Tanola & Nob, 2024).

3.3.2 Maintaining Student Engagement

Teachers were able to build good rapport with students even while teaching outside their specialization, which helped them maintain engagement. They also tried to respond to student queries despite the limitations posed by teaching subjects beyond their expertise. As the respondents shared:

“Positively influenced my way when it comes to engaging with the learners inside the classroom.” (P-4)

“I read different materials related to my lesson to master it and handle my student’s question.” (P-6)

Although responding to students’ questions was initially a challenge for teachers teaching outside their specialization, some were able to transform this difficulty into an opportunity for professional growth by studying lessons more deeply and addressing learner concerns more effectively. This resulted in a positive impact on their teaching practice and aligns with Leonin’s (2024) view of a student-centered classroom, where teachers act as facilitators who encourage participation, consider learners’ needs, and actively guide and support the learning process—even when teaching beyond their area of expertise

3.3.3 Well-Rounded Knowledge Across Different Subject

Through the teachers’ experience, they tend to be more knowledgeable over time of the subject outside their specialization that leads them to be more confident and able to address the student questions later. These are evident on the response of some of the participants:

“It helped me a lot personally not only because it pushed me to do something that I’m familiar with, but it challenged me to step out of my comfort zone and to explore what I can do more or what I can do the most.” (P-2)

“I was able to learn more, expound my knowledge even wider when it comes to other disciplines.” (P-4)

“I have explored; I have discovered new things on that subject that have added to my knowledge.” (P-7)

“My knowledge about that major has been greatly expanded. I have explored, I have discovered new things on that subject that have added to my knowledge, which I can still teach to these and the next generations.” (P-7)

These areas were supported by the findings the opportunities in teaching non-specialized subjects, specifically focusing on two themes: Well-Rounded Educator and Life-long Learner (Yumang, 2021).

3.3.3 Students' Low Academic Performance

One significant negative impact observed was students' low academic performance. When teachers teach

outside their expertise, it can potentially affect the quality of instruction and, consequently, the students' learning outcomes. As the participants mentioned that:

"There are times that the engagement of the students is poor, maybe because the learning style of the teacher is different from their previous one. The learning outcomes are much more difficult to measure and predict." Science Teacher (P-1)

"Some of them are not paying attention I know it really affects student learning and involvement in class because, ah, even I am not familiar with the subject." Math Teacher (P-6)

"Some of them are bored because they don't like what you're teaching." Filipino Teacher (P-7)

Although student engagement may decrease when teachers handle subjects outside their expertise, this does not fully contradict earlier claims that engagement can still be maintained. Rather, it suggests a nuanced outcome in which teaching outside specialization increases the risk of disengagement, but effective strategies can help mitigate this challenge. This issue is critical because student engagement is closely linked to academic achievement; engaged students show greater effort, participation, motivation, attendance, and higher academic performance (Fredericks et al., 2004; Russell et al., 2005; Klem & Connell, 2004). Thus, despite the challenges, sustaining student engagement remains essential in supporting positive learning outcomes.

According to Filipino Teacher (P-7) *"They did not acquire the knowledge that they needed; it seems that they only learned the prior knowledge."* Science Teacher (P-2) added, *"If I was not able to give an accurate date, name, and event to their questions"*. Then they would likely show dissatisfaction on their faces, in terms of feedback, they would give negative, like I am, I do not know what I am teaching".

The accurate delivery of information is essential to students' comprehension and overall academic success, as clear and correct details enable learners to grasp key concepts effectively. When information such as dates, names, and events is presented inaccurately, it can confuse students and lead to learning difficulties that affect their performance. This concern is supported by Kifaya (2009), who explains that various factors encountered throughout schooling can hinder a student's ability to achieve and sustain a high-grade point average (GPA) that truly reflects academic ability. This finding reinforces the argument that inaccuracies in instruction can negatively influence learning outcomes, emphasizing the need for teachers to deliver precise and reliable information to support students' academic progress.

3.3.4 Teachers' Mental and Emotional Well Being

Another crucial theme that emerged from the findings was the impact on teachers' mental and emotional well-being. Teaching outside one's specialization can lead to increased stress, anxiety, and feelings of inadequacy among educators, affecting their overall job satisfaction and mental health. As the teachers shared:

"Teaching subjects outside my area of specialization may be stressful during those times." (P-4)

"I feel stressed about thinking of ways how to engage to my students specially that teaching subjects outside my specialization is difficult for me, because it has adverse effects on me and to my students learning." (P-6)

"I'm having a hard time with the planning and preparation of the lesson. It is always in a trial-and-error scenario, either in maintaining the engagement of the students or in the interest of the teacher in facilitating the lesson". (P-1)

"I think it lowers the quality of instruction and really affects student achievement. Teaching outside the area of my specialization makes me feel a little bit unqualified and incompetent in this area." (P-2)

This implies that teaching outside one's specialization can be a significant source of stress for educators. The pressure to plan and prepare engaging lesson for a subject they are unfamiliar with can lead to feelings of

inadequacy, overwhelm and burnout.

When it comes to teaching unfamiliar courses, teachers may have to spend more time learning new content and putting more effort into lesson preparation. This can lead to job stress and dissatisfaction among teachers as they must devote more time and effort to teaching different content and learning new materials (du Plessis, 2015). Furthermore, Hobb (2013) and Riordain et al. (2019) added that their ability to advance in their field of competence may be hampered by these activities. According to Science Teacher (P-2) *"In terms of teacher retention, I was not satisfied with the work I provide, with the service I provide."* Filipino Teacher (P-7) added, *"I'm not that satisfied because, I'm not yet an expert in that subject and teachers will not stay for long if that's the case."* Another, Filipino Teacher (P-7) shared, *"Our school said that's only a minor subject, and we are still young teachers, so we can teach it though – so we teach it – no choice, we just go with the flow"*.

The participants are unsatisfied with their work due to a lack of expertise in a subject. Additionally, being assigned to teach subjects considered minor may lead to feelings of inadequacy and affect job satisfaction. According to Pillay et al. (2005), instructing courses outside of the subject matter experts' expertise can make teachers feel less competent. Teachers need to put a lot of effort into their expertise to hone teaching abilities and expand subject understanding (Robbs & Broyles, 2012). Teachers must put in at least a thousand hours of intense study to a particular subject or domain to become experts in it (Berliner, 1986; Sternberg, 1998).

Participant Filipino Teacher (P-7) stated, *"It's hurtful to think or consider it was a bit too much because at that time when I am not that prepared to teach, they did not acquire the knowledge that they needed it seems that they only learned the prior knowledge and yet they need to go to the next grade level."* AP Teacher (P-3) said *"I feel exhausted, tiring and can't sleep because I need to read during the night and it's affecting my physical health. And I'm the only Filipino and AP teacher so I don't collaborate much with others."*

Being unprepared to teach may result in students not acquiring the necessary knowledge to progress effectively, leading to gaps in their learning as they move to the next grade level. This could impact the overall academic development of the students. On the other hand, exhaustion, lack of sleep, and isolation of teacher may have adverse effects on their physical health and job satisfaction. The lack of collaboration with peers could limit opportunities for professional growth and support, potentially leading to increased stress and burnout.

3.3.5 Expertise Becomes Outdated

The findings indicate that teaching outside one's specialization can gradually weaken teachers' mastery of their original field, which may affect their performance when they are later assigned to teach within their expertise. As teachers devote time and effort to unfamiliar subjects, they have fewer opportunities to practice, update, and refine their specialized knowledge. This concern is reflected in the participants' statements: *"The learning plan is not accurate with the learning outcome, which may lead to a lack of effective demonstration of the topic"* (Science Teacher, P-1), and *"As to my case, my specialization gets a little rusty"* (English Teacher, P-4). These responses suggest that prolonged non-specialized teaching can result in less accurate lesson planning and reduced instructional effectiveness, even in a teacher's original discipline.

This result aligns with studies showing that limited or outdated subject matter knowledge negatively affects instructional quality and student achievement (Baumert et al., 2010; Darling-Hammond, 2010; William, 2009). Teachers with strong and current content mastery are better able to explain concepts clearly, align lessons with learning objectives, and address students' difficulties effectively (Pillay et al., 2005; Tsui, 2009). Consequently, teaching outside one's expertise not only poses immediate instructional challenges but may also erode teachers' confidence and effectiveness when they return to their specialized field.

4. Conclusion

Based on the findings, teaching outside of one's area of expertise poses serious difficulties for educators,

especially when it comes to weak cognitive foundations of learning, inadequate pedagogical knowledge and skills, limited skill competence, declining teacher wellness, and insufficient administrative support. Teachers used a variety of coping strategies, such as preparation and planning, appropriate instructional approaches, learning and curriculum focus, resourcefulness, student-centered practices, and nonverbal communication, to address these difficulties and close knowledge gaps. These strategies enabled teachers to manage unfamiliar subject matter and classroom demands; however, their implementation resulted in both positive and negative effects on different education stakeholders.

The positive effects of out-of-field teaching included the improvement of teachers' instructional skills, maintenance of student engagement, and development of well-rounded knowledge in non-specialized subjects. The results also showed detrimental effects, especially students' poor academic performance and teachers' mental and emotional exhaustion. Despite these difficulties, teaching outside of one's area of expertise can give educators the chance to learn more, broaden their knowledge, hone their professional skills, and enhance their effectiveness as educators. Therefore, the results imply that the results of teaching outside of one's field are impacted not only by the task itself but also by the teachers' coping mechanisms and the degree of school support.

In order to address the difficulties and optimize the potential advantages of out-of-field teaching, the findings have practical implications for teachers, students, and educational institutions. The study indicates that while teaching outside one's area of expertise may create difficulties in subject matter knowledge, pedagogical skills, competence, teacher well-being, and administrative support, it can also foster professional development, resourcefulness, adaptability, and broader knowledge when appropriate strategies and support are available.

For Teachers. Teachers who are assigned to subjects outside of their areas of expertise must improve their preparation, lesson planning, familiarization with the curriculum, and ongoing pedagogical and subject-matter expertise. The difficulties in comprehending new material, choosing effective teaching techniques, matching lessons to competencies, and answering students' inquiries highlight how crucial it is to prepare ahead of time and confer with colleagues or subject matter experts. Effective instruction may be further supported by the use of trustworthy textbooks, internet resources, educational materials, and learner-centered strategies like experiential, hands-on, multimedia, and game-based activities. Long-term out-of-field teaching may necessitate more time and emotional effort, so educators should be aware of their workload, stress, and general wellbeing.

For Students. The results highlight how crucial it is to make sure that students receive instruction that is accurate, pertinent, meaningful, and competency-aligned, especially when teachers are assigned to subjects outside of their areas of expertise. Low academic performance and reported student disengagement underscore the necessity of instructional strategies that actively engage students and address their various needs. Through inquiry, teamwork, research, hands-on activities, and real-world applications, educators can encourage involvement. In addition to ensuring that students acquire the knowledge and skills required for continued academic progress, differentiated and student-centered approaches may help maintain engagement.

For administrators and schools. By offering easily accessible, pertinent, and ongoing professional support, schools and administrators can significantly lessen the challenges associated with teaching outside of their field. Training and seminars, educational resources, peer collaboration, mentoring, discussions with subject matter experts, and ongoing feedback on teaching methods are a few examples of this kind of support. Schools should make sure that support is tailored to the real instructional needs of teachers teaching non-specialized subjects, as participants reported varying degrees of administrative support. When creating teaching assignments, administrators should also take into account the specializations and professional development requirements of the teachers. Teachers should receive extra assistance to help them handle the demands of unfamiliar subjects when out-of-field assignments are inevitable. Additionally, in order to support teachers' long-term professional development, opportunities to maintain and enhance their original areas of specialization should be taken into consideration.

Overall, the study emphasizes that teaching outside of one's field can present both opportunities and challenges

for professional growth. Inadequate planning and institutional support could lead to teacher fatigue and learning challenges for students. However, out-of-field teaching can also foster instructional competence, adaptability, resourcefulness, and broader professional knowledge when teachers use suitable coping mechanisms and schools offer sufficient resources, professional development, and collaborative support. Therefore, in order to maximize the potential benefits of out-of-field teaching for teachers, students, and the larger educational institution, it is imperative to strengthen teacher preparation, support learner-centered instruction, and establish responsive school-based support systems.

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